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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,828	10/20/2004	Alain Coudurier	COUDURIER1	8826

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EXAMINER	
WYSZOMIERSKI, GEORGE P	

ART UNIT	PAPER NUMBER
1742	

MAIL DATE	DELIVERY MODE
08/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/511,828	COUDURIER, ALAIN	
	Examiner	Art Unit	
	George P. Wyszomierski	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5, 9, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Myers et al. (U.S. patent 4,673,468).

Myers discloses cooking surfaces or kitchen utensils including an amorphous alloy obtained by what can be interpreted as depositing or assembling an amorphous alloy on a substrate, the substrate being one of the materials as recited in instant claim 14; see example 9 of Myers. The plated product produced by Myers is suitable for use as cookware. Example 11 of Myers discloses similar embodiments, but in which an amount of polytetrafluoroethylene is included in the amorphous coating, and the products made in this manner are also suitable for use as cookware or other ordinary kitchen utensils. Thus, all aspects of the claimed invention are held to be fully disclosed by Myers et al.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6-8 and 10-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Myers et al.

The prior art does not disclose the process limitations recited in product-by-process terms in the instant claims. However, it is unclear what distinction, if any, could be made between the surfaces as disclosed in the prior art and surfaces that are within the scope of the instant claims. It would thus appear that the products as claimed are in fact the same (in the sense of 35 USC 102) as the products disclosed in the prior art.

At a minimum, the examiner notes that it is well settled that a product-by-process claim defines a product, and that when the prior art discloses a product substantially the same as that being claimed, differing only in the manner by which it is made, the burden falls to applicant to show that any process steps associated therewith result in a product materially different from that disclosed in the prior art. See *In re Brown* (173 USPQ 685) and *In re Fessman* (180 USPQ 524). In the present case, Applicant has not met this burden. Thus, a prima facie case of obviousness is established between the disclosure of Myers et al. and the presently claimed invention.

5. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al.

Myers does not specifically recite a surface in contact with food being cooked as recited in claims 16 and 17, or an upwardly facing surface for this purpose as recited in instant claim 18. The examiner refers back to examples 9 and 11 of Myers, noted in item no. 2 supra. Myers specifically indicates that the prior art products are intended for use as cookware or ordinary kitchen utensils. Also, Myers example 11 indicates that polytetrafluoroethylene is mixed with the coating. The examiner's position is that the most reasonable interpretation of this aspect of the Myers disclosure is that Myers is describing products such as Teflon® coated cooking utensils. Such products would have the amorphous material in contact with food when used as

part of a cooking utensil. Thus, the Myers et al. disclosure is held to establish a prima facie case of obviousness of the presently claimed invention.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al. in view of Hashimoto et al (U.S. Patent 5,380,375).

The Hashimoto patent indicates that it was known in the art, at the time of the invention, to deposit amorphous alloys of a great variety of compositions (see Hashimoto Table 1) on a substrate by a sputtering process. This teaching of Hashimoto would have motivated one of skill in the art to deposit the amorphous materials as disclosed by Myers et al. by a sputtering method.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al. in view of Hays (PG Pub. No. 2002/0003013).

Hays paragraph [0014] indicates that it was known in the art, at the time of the invention, to form bulk metallic glass (i.e. amorphous alloys) by powder metallurgy steps. Since the final product in Hays is a metallic glass, such a process must also include vitrification as recited in the instant claim. This disclosure of Hays would have motivated one of skill in the art to form the amorphous materials as disclosed by Myers et al. by the process steps as defined in the instant claim.

8. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (U.S. patent 5,735,975) or Xing et al. (U.S. Patent 6,692,590), either of which in alone or in view of Myers et al.

The Lin and Xing patents disclose amorphous alloy compositions as recited in instant claims 3 and 4; see the Table in column 7 of Lin or Xing column 4, lines 19-22. Lin and Xing further indicate that non-amorphous phases may be present in such alloys as a result of either an insufficiently rapid quenching of the alloy material or from a brief heating of an already formed amorphous alloy; this is analogous to the presence of the nanocrystalline phase as recited in instant claim 2.

Lin and Xing do not specifically disclose food cooking surfaces or kitchen appliances made of such materials. However,

a) It is unclear what specific physical limitations would be implied by the term "food cooking surface", i.e. any reasonably flat surface can be employed for the purpose of cooking food. This is correct even if one were to limit the scope of the instant claims to a cooking surface that is in contact with food to be processed, as recited on page 1, lines 6-7 of the present specification. (The examiner is not limiting the scope of the independent claim in this manner, because such an interpretation would render claims 16 and 17 meaningless).

b) Myers indicates that it was well-known in the art, at the time of the invention, to employ an amorphous alloy as a cookware or kitchen utensil surface, and discusses advantages attributable thereto.

Thus, the metallic materials of Lin et al. and Xing et al. do not appear to be patentably distinguishable from the materials as defined in the instant claims, especially in view of the specific known use of amorphous materials as set forth in Myers et al.

9. In a response filed June 28, 2007, Applicant indicates that the previously applied Eide and Manov et al. references do not specifically disclose any amorphous material that will be in contact with food when used as a food cooking surface. The examiner

agrees that these references are clearly not as relevant to the instant claims as the Myers reference; thus all rejections based on Eide or Manov et al. alone or in combination with other references are withdrawn at this time.

Applicant suggests that the claimed invention can be distinguished from the Myers patent because some lack of disclosure of biological safety of a cooking surface by Myers or alternatively disclosure by Myers of information regarding lubricity of the surface indicates that the surfaces of Myers would not be equivalent to those presently claimed. With respect to a lack of disclosure of biological safety, the examiner's position is that one cannot expect detailed disclosure of such features in a patent in which the main invention relates to a coating process (such as the Myers et al. patent), and in any event no particular distinction of this feature has been shown to exist between the prior art products and those of the invention. With regard to lubricity, the examiner's position is that contrary to Applicant's position, any disclosure that may be present in Myers of such a feature actually suggests that the examiner's position is correct--namely that Myers is referring to food cooking surfaces similar to those claimed by Applicant. The concept that lubricity is maintained even after scrubbing with abrasives would be important in the cooking utensil art, where frequent cleaning is required (often with abrasive materials), and one would want to be able to maintain a level of lubricity, i.e. a non-sticking surface, after multiple cleaning cycles.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Wyszomierski whose telephone number is (571) 272-1252. The examiner can normally be reached on Monday thru Friday from 8:00 a.m. to 4:30 p.m. Eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King, can be reached on (571) 272-1244. All patent application related correspondence transmitted by facsimile must be directed to the central facsimile number, (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GEORGE WYSZOMIERSKI
PRIMARY EXAMINER
GROUP 1700

GPW
August 6, 2007